ACCESSION NR: AP5007788

ASSOCIATION:

SUBMITTED: 00	ENCL: 00	SUB CODE: EC	
NO REF SOV: 000	OTHER: 000	ATD PRESS: 3238	

Card 2/2

L 42[illegible]-65

ACCESSION NR: [illegible]

TITLE: A-c differentiating [illegible]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. [illegible], 1961, 16

TOPIC TAGS: ac differentiating device, [illegible] circuit, servosystem, stabilization

ABSTRACT: The proposed a-c differentiating circuit, for the stabilization of servosystems, reacts only to increases in signal amplitude. It contains integrating elements [illegible]

ASSOCIATION: none

SUBMITTED: 10ct61 ENCL: 00 SUB CODE: EC, IE
NO REF SOV: 000 OTHER: 000 ATD PRESS: 3237

Card 1/1

TURCHENKOV, V.I., master (Volgograd)

Refesigning of the semiclutch of an electric motor.
Energetik 14 no.1:32-33 Ja '66. (MIRA 19:1)

STOROZHENKO, Aleksandr Panteleyevich;SOKOLOV, Vladimir Gennadiyevich; KOZLOVA, Neonila Petrovna; GUSAROVA, Mariya Afrikanovna; VORONOV, Kuz'ma Denisovich; KARPOVA, N.N., otv. red.; TURCHENKO, V.K., otv. red.; GARBER, T.N., red. izd-va; BOLDYREVA, Z.A., tekhn. red.

[Maintenance of machines in coal-preparation plants] Ukhod za mashinami na ugleobogatitel'nykh fabrikakh. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1961. 258 p. (MIRA 15:1)

(Coal preparation—Equipment and supplies)

TURCHENKO, V.K., inzh.

Studying the process of bed scouring in a curvilinear flow. Obcg. i brik. ugl. no.26:58-61 '62. (MIRA 17:8)

DUNAYEV, M.N.; TURCHENKO, V.K.; GREBENSHCHIKOV, V.P.; MELIK-STEPANOVA, A.G.; OL'FERT, A.I., otv. red; PRONINA, N.D., tekhn. red.

[Preparation, dewatering, and drying of fine coal; survey of foreign material]Obogashchenie, obezvozhivanie i sushka melkogo uglia; obzor zarubezhnykh materialov. Moskva, TSentr. in-t tekhn. informatsii, 1962. 77 p. (MIRA 16:4)
(Coal preparation)

DUNAYEV, Maksim Nikitovich, inzh.; TURCHENKO, Vasiliy Kuz'mich, inzh.; MELIK-STEPANOVA, Alla Georgiyevna, inzh.; GREBENSHCHIKOV, Vladimir Petrovich, inzh.; DREMAYLO, P.G., otv.red.; OL'FERT, A.I., red.izd-va; BOLDYREVA, Z.A., tekhn. red.

[Preparation of unclassified coals]Obogashchenie neklassifitsirovannykh uglei. [By]Dunaev, M.N. i dr. Moskva, Gosgortekhizdat, 1963. 181 p. (MIRA 16:3)
(Coal preparation)

DUNAYEV, M.N., inzh.; TURCHENKO, V.K., inzh.

Coal jigging. Obog.i brik. ugl. no.21:75-83 '61. (MIRA 16:5)
(Coal preparation) (Separators (Machines))

SKLOVSKAYA, A.A., otv. red.; DREMAYLO, P.G., inzh., zam. otv. red.; KAMINSKIY, V.S., kand. tekhn. nauk, zam. otv. red.; AVETISYAN, A.N., red.; BRILLIANTOV, V.V., kand. tekhn. nauk, red.; GALIGUZOV, N.S., kand. tekhn. nauk, red.; GORLOV, I.P., red.; GREBENSHCHIKOV, V.P., red.; DAVYDKOV, N.I., red.; ZVENIGORODSKIY, G.Z., red.; KARPOVA, N.N., red.; KOZKO, A.I., red.; MARUSEV, P.A., red.; PONOMAREV, I.V., red.; POPUTNIKOV, F.A., red.; SOKOLOVA, M.S., kand. tekhn. nauk, red.; TURCHENKO, V.K., red.; FILIPPOV, V.A., red.; YUSIPOV, A.A., red.; YAGODKINA, T.K., red.; MIRONOVA, T.A., red. izd-va; LOMILINA, L.N., tekhn. red.; MAKSIMOVA, V.V., tekhn.red.

[Technological trends in coal preparation] Tekhnicheskie napravleniia obogashcheniia uglei. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1963. 120 p. (MIRA 16:10)

1. Gosudarstvennyy proyektno-konstruktorskiy i nauchno-issledovatel'skiy institut po obogashcheniyu i briketirovaniyu ugley. 2. Gosudarstvennyy proyektno-konstruktorskiy i nauchno-issledovatel'skiy institut po obogashcheniyu i briketirovaniyu ugley (for Yagodkina, Brilliantov).
(Coal preparation)

L 16148-63

ACCESSION NR: AR3005171 S/0058/63/000/006/B019/B019

SOURCE: RZh. Fizika, Abs. 6 Zh120 45

AUTHORS: Tereshchenko, A. I.; Shevin, A. G.; Turchenko, V. L.

TITLE: Q of anode block of the magnetron type of resonators of elliptic cross section

CITED SOURCE: Uch. zap. Khar'kovsk. un-t, v. 127, 1962, Tr. Radiofiz. fak., v. 6, 43-49

TOPIC TAGS: Magnetron, anode block, intrinsic Q, elliptic cross section

TRANSLATION: An approximate calculation is made of the intrinsic Q of a magnetron block of resonators of elliptic cross section. The stored high-frequency energy and the energy lost in the metal walls, which are contained in the expression for the Q, are calculated with the aid of the high-frequency component of the magnetic field, expressed in terms of Mathieu functions of the first and second kind. Analytic formulas are obtained for the intrinsic Q of a single elliptic resonator and of a block of elliptic resonators with account of the effect of the anode-

Card 1/2

L 16148-63

ACCESSION NR: AR3005171 O

cathode space. For example, the intrinsic Q calculated from the formulas given in the paper for a system of eight elliptic resonators in eight requency bands, is equal to 1950. From a comparative table of the values of Q of resonators of different types used in magnetrons it follows that theelliptic resonators have the largest Q. In addition, it is noted that an ancde block with elliptic resonators has also larger frequency separation as compared with other resonators (approximately 4.8--5.6% without straps). G. Korostelev.

DATE ACQ: 15Jul63 SUB CODE: GE, SP ENCL: 00

Card 2/2

TURCHENKO, Vadim Vasil'yevich, polkovnik, kand.voyennykh nauk;
DUKACHEV, M.P., polkovnik, red.; SLEPTSOVA, Ye.N., tekhn.red.

[Consolidating gains in battle] Zakreplenie uspekha v boiu. Moskva, Voen.izd-vo M-va obor.SSSR, 1960. 127 p.
(MIRA 14:2)

(Tactics)

TURCHENKOV, V.I.

Annular electronic commutator for switching two-polar constant voltage. Izm. tekh. no.1:25-26 Ja '64.
(MIRA 17:11)

[illegible]

TOPIC TAGS: transistorized trigger, relay servo

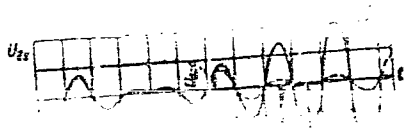
ABSTRACT: A transistorized trigger circuit is described (see Enclosure 1) which includes: resistors R_1–R_5 intended for summing the input signals, reference voltage, and symmetry voltage, a d-c Schmidt trigger, TC proper, phase [illegible] relaying relay K, actuating [illegible] voltage curves for and (c) illustrate the functioning of the device. The trigger circuit responds to the phase of a 6.3-v 400-cps supply power. Orig. art. has: 3 figures and 6 formulas.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 01

SUB CODE: EC NO REF SOV: 000 OTHER: 000

Card 1/2



TURCHENKOV, V.I., inzh.

Precise stabillzation of the amplification factor of an amplifier and the determination of its failure moment under operating conditions. Priborostroenie no.3:27 Mr '65.
(MIRA 18:4)

TROFIMENKO, N.; SHAKALOV, O.; TURCHENKOVA G.

Chemicalization as a way for increasing the production of grain.
Zemledelie 26 no.9:79 S '64. (MIRA 17:11)

1. Glavnyy agronom sovkhoza "Gigant" Rostovskoy oblasti (for Trofimenko). 2. Starshiy agronom-polevod sovkhoza "Gigant" Rostovskoy oblasti (for Shakalov). 3. Zaveduyushchaya agrokhimicheskoy laboratoriyey sovkhoza "Gigant" Rostovskoy oblasti (for Turchenkova).

SHTEYNBUKH, N.V.; TURCHENKOVA, V.Yu.

Electroencephalographic changes in tuberculous meningitis in children during therapy. Zhur.nevr. i psikh. 56 no.9:725-730 '56. (MIRA 9:11)

1. Rostovskiy oblastnoy nauchno-issledovatel'skiy pediatricheskiy institut

(ELECTROENCEPHALOGRAPHY, in various diseases,
thuberc. meningitis in child. during ther. (Rus))
(TUBERCULOSIS, MENINGEAL, in infant and child,
EEG during ther. (Rus))

PHASE I BOOK EXPLOITATION 468

Turchenko, Yakov Ivanovich

Osnovnyye puti razvitiya obshchey, neorganicheskoy i fizicheskoy khimii na Ukraine; XIX st. i pervaya polovina XX st. (Basic Trends in the Development of General, Inorganic and Physical Chemistry in the Ukraine; the 19th Century and First Half of the 20th Century) Kiev, Izd-vo Kievskogo gos. univ-ta, 1957. 433 p. 4,000 copies printed. Sponsoring agencies: Ministerstvo vysshego obrazovaniya UkSSR and Kievskiy tekhnologicheskiy institut legkoy promyshlennosti. Kafedra neorganicheskoy i analiticheskoy khimii.

Resp. Ed.: Kotov, M. P., Prof.; Ed.: Skvirskaya, M. P.; Tech. Ed.: Khokhanovskaya, T. I.

PURPOSE: The book is intended as a reference book for scientists interested in the history of chemistry.

COVERAGE: Some works pertaining to organic chemistry, analytical chemistry and chemical technology which contributed to the development of general and physical chemistry were included in this book to give full coverage of the history of

Card 1/6

Basic Trends in the Development (Cont.)

development of general and physical chemistry in the Ukraine. Scientific works of Soviet and non-Soviet chemists published in 1800-1956 were used as source material. With some exceptions, material up to the second half of the 19th century was used. Brief biographies of the most famous chemists are given in footnotes. Data from books by G. A. Mel'nik, G. S. Al'terzon, etc. were included in the book. There are 760 references, 707 of which are Soviet, 40 German, 6 French, and 7 English.

TABLE OF CONTENTS:

Card 2/6

Basic Trends in the Development (Cont.)

AVAILABLE: Library of Congress

Card 6/6

TM/eag
10/8/58

TURCHENKO, Ya. I.

137-1-71

Translation from: Referativnyy Zhurnal, Metallurgiya, 1957, Nr 1 p. 6 (USSR)

AUTHOR: Turchenko, Ya.I.

TITLE: "Typicality of Nectary" (A handwritten collection of prescriptions for the industrial practice of the XVI century) ("Tipik Nektariya"-Rukopisnyy retsepturnyy sbornik po remeslennoy tekhnike XVI v.)

PERIODICAL: Tr. Kiyevsk. tekhnol. in-ta legkoy prom-sti, 1955 Nr 7, pp. 196-219

ABSTRACT: Part I of a manuscript dating back to the beginning of the XVIII century is presented. The work contains specifications and directions for the production of white lead. The technique of Au deposition on Ag, Cu, etc., is described in detail, a method of producing synthetic ("artificial") gold is presented, also other data.

Card 1/1 A.Sh.

TURCHENKO, Ya. I.

History of communication among chemists of Slavonic countries. Ya. I. Turchenko. *Uspekhi Khim.* 22, 375–6 (1953).—Historical with citations and reproduction of letters.

G. M. Kosolapoff

10-8-54 MEF

TURCHENKO, Ya.

Chemists

From the history of interrelations between chemists of Slavic countries. Usp. khim. 22, No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

TURCHENKO, Ya.I.; FIGUROVSKIY, N.A., redaktor.

Nikolai Nikolaevich Beketov. Moskva, Izd-vo Akademii nauk SSSR, 1954. 206 p. (MLRA 7:11)
(Beketov, Nikolai Nikolaevich, 1827-1911)

TURCHENKO, Ya.I.

History of communication among chemists of Slavonic countries. Uspekhi Khim. 22, 375-6 '53. (MLRA 6:3)
(CA 48 no.2:415 '54)

BULANZHE, I. N., kand.khimicheskikh nauk, dotsent; TURCHENKO, Ya. I., dotsent, kand. tekhn. nauk; ZIL'BERG, G. I., inzh.

Studying the wear resistance of phosphate coated steel surfaces. Report no.1. Izv.vys.ucheb.zav.; tekh.leg.prom. no.4:147-153 '61. (MIRA 14:10)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti. Rekomendovana kafedroy obshchey i analiticheskoy khimii.
(Steel, Structural—Testing)
(Phosphate coating—Testing)

S/137/62/000/001/208/237
A154/A101

AUTHORS: Bulanzhe, I. N., Turchenko, Ya. I., Zil'berg, G. I.

TITLE: Investigation of the wear-resistance of phosphate-coated steel surfaces. Communication 1

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1962, 94, abstract 1I673 ("Izv. vyssh. uchebn. zavedeniy. Tekhnol. legk. prom-sti", 1961, no. 4, 147 - 153)

TEXT: A pure Mazhef solution is the most suitable for phosphate-coating small parts. Various additions of CaO, $BaCO_3$ and $Ba(NO_3)_2$, as well as passivation in a $K_2Cr_2O_7$ solution, impair the external appearance of the items, giving them a greyish hue. The most aggressive solutions are Mazhef solutions containing $BaCl_2$, and superphosphate solutions containing $H_2C_2O_4 + Na_2C_2O_4$. They can be recommended for phosphate-coating alloyed steels. The most corrosion-resistant coatings are obtained from a Mazhef solution brought to the required acidity by the addition of $MnCO_3$ or Na_3PO_4, with subsequent treatment in commercial vaseline. The corrosion-resistance of phosphate coatings is over 10 times higher than that of coatings obtained by hot sulfidizing or oxidizing. Phosphatizing increases

Card 1/2

Investigation of the...

the wear-resistance of items subjected to comparatively low specific pressures (12 - 14 kg/cm^2) and low speeds (200 rpm). Under these conditions the most effective results are obtained in phosphate-phosphate friction. The friction surface becomes smooth, lustrous and black. The friction factor varies between 0.03 and 0.09. A film obtained from a Mazhef solution possesses the highest electrical resistivity - $5 \cdot 10^7$ ohm/cm at 20°C. There are 7 references.

Authors' summary

[Abstracter's note: Complete translation]

Card 2/2

BOL'SHAKOV, L.A., kand.tekhn.nauk; BUL'SKIY, M.T., inzh.; TURCHENKOVA, Ye.K., inzh.; YEGNUS, R.M., inzh.; SVIRIDENKO, F.F., inzh.; TARASOVA, L.P., inzh.; SLEPKANEV, P.N., inzh.; GAVRIKOV, V.Z., inzh.

Efficient design of large rail ingot molds. Stal' 20 no.9:793-797 S '60. (MIRA 13:9)

1. Zavod "Azovstal'" i Zhdanovskiy metallurgicheskiy institut.
(Ingot molds)

TURCHINOVICH, N.N.

USSR/Microbiology. Hemoglobinophillic Bacteria. Pathogenic Fungi and Actinomycetes F-5

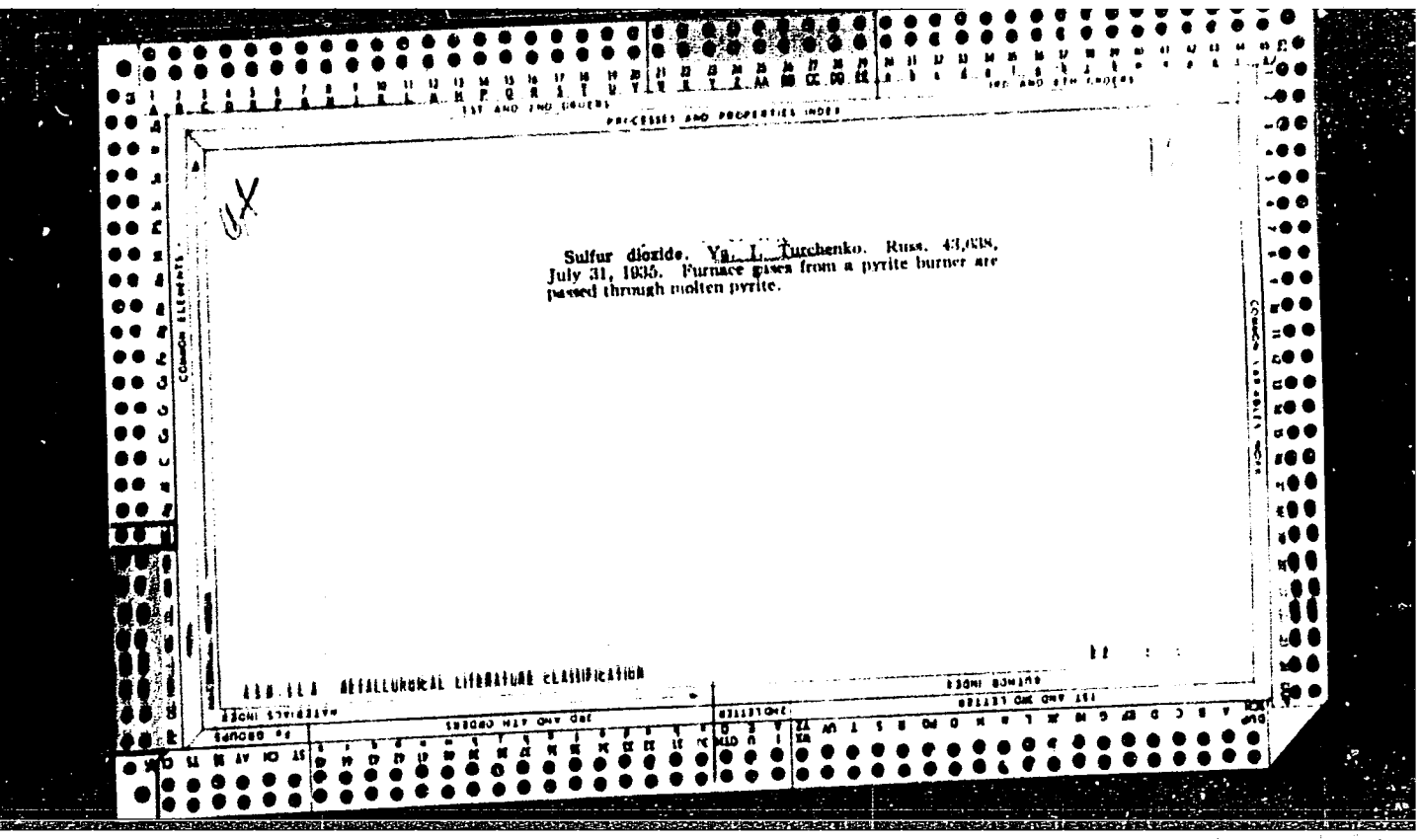
Abs Jour : Ref Zhur - Biol., No 14, 1958, No 62528

Author : Turchinovich N.N.
Inst : Stalinskiy Institute for the Advanced Training of Physicians
Title : Candidamycoses in Ophthalmology. Experimental Data

Orig Pub : Sb. tr. Stalinsk. in-t usoversh. vrachey, 1957, 27, 338-346

Abstract : No abstract

Card : 1/1

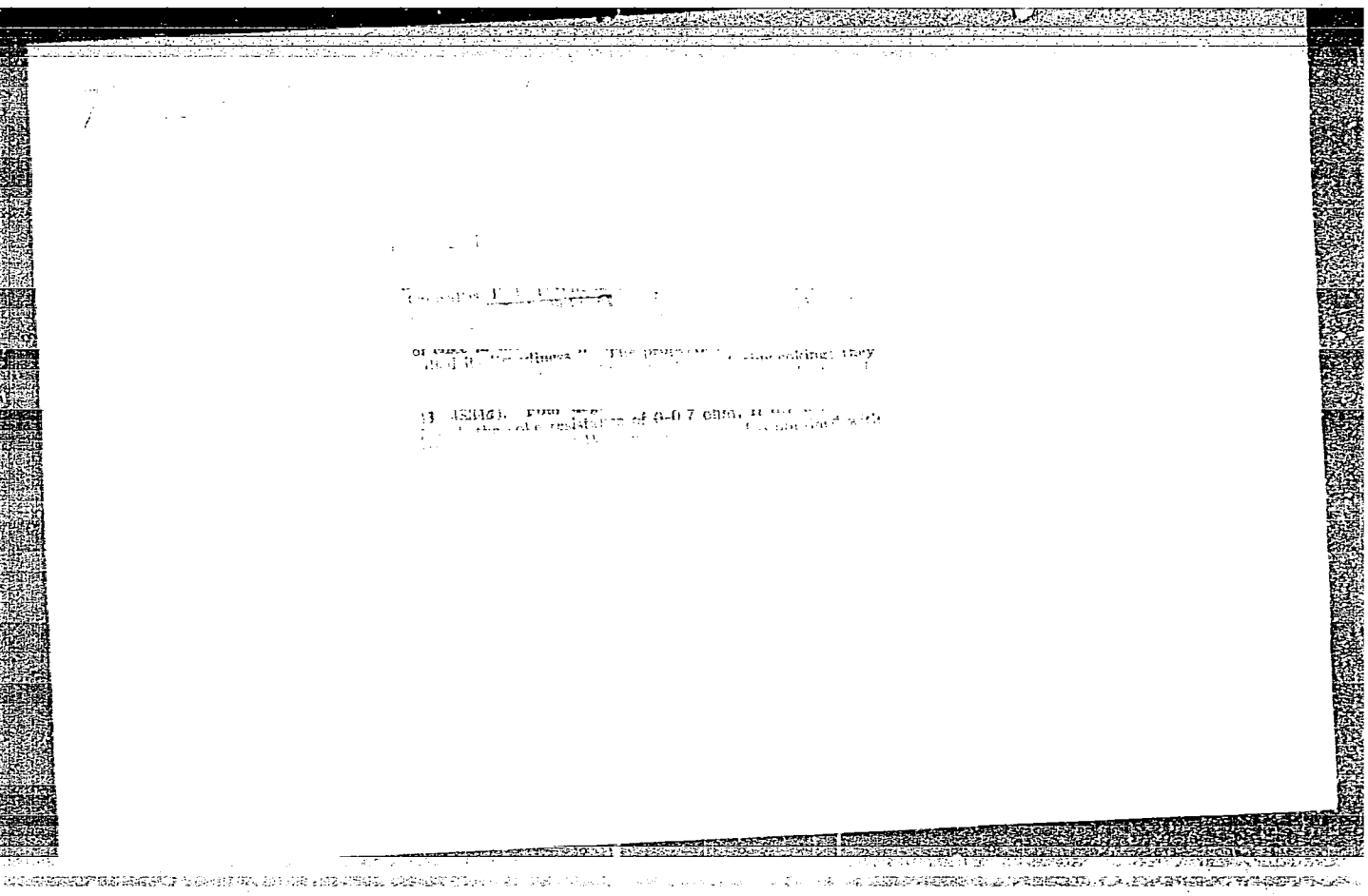


Sulfur dioxide. Ya. I. Turchenko. Russ. 43,038, July 31, 1935. Furnace gases from a pyrite burner are passed through molten pyrite.

TURCHENKO, Yakov Ivanovich; KOTOV, M.P., prof., otvetstvennyy red.; SKVIRSKAYA, M.P., red.; KHOKHANOVSKAYA, T.I., tekhn.red.

[Main lines of the development of general, inorganic and physical chemistry in the Ukraine (the 19th century and the first half of the 20th century)]. Osnovnye puti razvitiia obshchei, neorganicheskoi i fizicheskoi khimii na Ukraine (XIX st. i pervaia polovina XX st.). Kiev, Izd-vo Kievskogo gos.univ.im.T.G.Shevchenko, 1957. 433 p. (MIRA 10:12)

(Ukraine—Chemistry--History)



TURCHENKOV, V.I.

A.C. phase sensitive resistor trigger circuit. Priborostroenie (MIRA 18:3)
no.12:19-21 D '64.

1524. STEINBURKH N. V. and TURCHENKOVA V. Yu. Reg. Sci. and Exp. Inst. of Paed., Tostov, USSR. "Changes in the encephalograms of children suffering from tuberculous meningitis during treatment (Russian text) Z. NEVROPAT. PSIKIAT. 1956, (725-730)-730)

564 EEG's were recorded of 61 children suffering from tb meningitis and of 25 children with serous meningitis and meningo-encephalitis of non tb origin. The number of recordings for one patient varied from 1 to 22 and the period of observation from 1 to 250 days. The EEG's were recorded by fronto-occipital derivations and additional bipolar occipito-temporal and temporal-frontal derivations as well as unipolar derivations from frontal, temporal, central and occipital areas were recorded. As a rule all the EEG's recorded in patients suffering from tb meningitis in the acute stage showed distinct pathological phases with characteristic depression of the α-rhythm and appearance of pathological slow waves. The frequency of the waves decreased and the voltage increased in ratio to the severity of the process. When treatment is started early in the quiescent phase of the process the EEG may become normal long before the meningeal symptoms disappear or the CSF returns to normal. When treatment is started at a later stage normalisation may be delayed until the 30th-60th days of the illness. In the convalescence period the α-rhythm is very unstable with regard to frequency and amplitude. When the disease becomes progressively generalized, death may be preceeded by gradual decrease of the voltage of the slow waves which become irregular. The repeated appearance or increase of pathological slow waves after 4-5 days preceeded the appearance of the first clinical symptoms of exacerbation or relapse. The above findings permit the conclusion that the presence of pathological slow waves points only to the severity of the disease and reflects the stage of the process but is not a specific symptom of tb meningitis. The data obtained by encophalography are no criteria in the differential diagnosis between tb meningitis and lymphocytic meningitis of non-tb origin in children, as stated by Tural et al.

Soloveva - Moscow (XV, 7, 8)

L 40851-66 EWT(1)
ACC NR: AP6010022 SOURCE CODE: UR/0119/66/000/003/0009/0009

46
B

AUTHOR: Turchenkov, V. I. (Engineer)

ORG: none

TITLE: Passive-element multiplier 15

SOURCE: Priborostroyeniye, no. 3, 1965, 9

TOPIC TAGS: logic element, computer component, electron multiplier

ABSTRACT: A multiplier such as the one shown in Fig. 1 can easily be built from passive elements if the voltage from a frequency sensor output is used as one of the multiplicands.

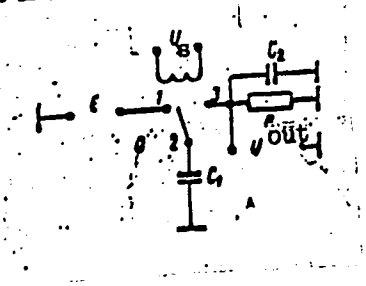


Fig. 1 Functional diagram of a multiplier. The voltage U_s is controlled by a switching device.

UDC: 621.374.4

Card 1/2

L 40851-66
ACC NR: AP6010022

The note presents the basic theory of the device and discusses its operation. A possible practical version of the multiplier is shown in Fig. 2. Orig. art. has: 5 formulas and 3 figures.

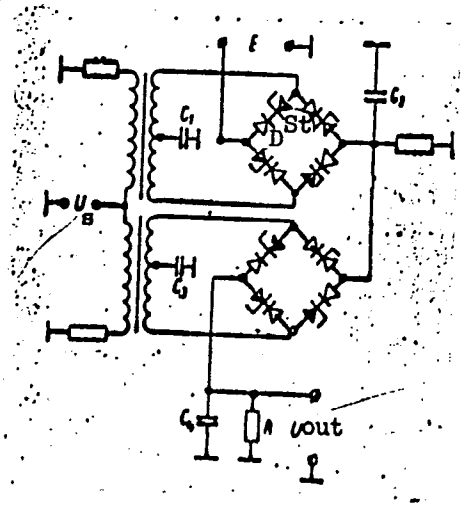


Fig. 2 Basic diagram of a multiplier: C_1, C_3 - intermediate capacitors; C_2, C_4 - filter condensers; D - diode; St - stabilitron.

SUB CODE: 09/ SUBM DATE: 00/ ORIG REF: 001/ OTH REF: 000

Card 2/2 MLP

L 34070-66 EWT(1) GG

ACC NR: AP6019781 SOURCE CODE: UR/0119/66/000/006/0017/0018

AUTHOR: Turchenkov, V. I. (Engineer)

ORG: none

TITLE: Phase switch based on semiconductor devices

SOURCE: Priborostroyeniye, no. 6, 1966, 17-18

TOPIC TAGS: trigger circuit, semiconductor device

ABSTRACT: A trigger circuit is discussed with two stable states characterized at its output by ac voltages whose phases differ by 180°. The circuit is activated by an ac input signal envelope exceeding a certain threshold. Functionally, the circuit is an ac dual of a Schmidt trigger circuit. Its schematic diagram is shown in the figure. It consists of an emitter coupled flip-flop fed by two full-wave rectifiers acting on an ac reference voltage U_{ref}. The circuit's threshold level is set by Zener diodes D_6—D_8. To change the state of the circuit, the reference and input voltages must be in synchronism. The time constant R_1C_1 determines the duration t_1 (see time chart); these are inversely related. The circuit was tested for stability, establishing that if transistor β is changed from 20 to 100 the threshold level changes from 16.5 to 17.2 v rms. When U_{ref} is changed from 8 to

UDC: 621.314.252

Card 1/2

L 34070-66

ACC NR: AP6019781

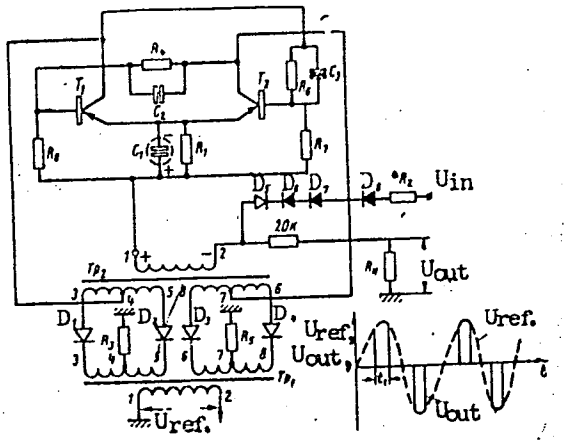


Fig. 1. AC trigger circuit

13 v rms the threshold levels change from -17, +17.7 to -18, +18.5 v rms, respectively (the signs refer to opposite phases). The threshold vs temperature tests indicated the following: at 20C the threshold levels were +17 and -17 v; at 60C they were +16.85 and -16.85; and at -60C they were +16.3 and -16.6 v rms, respectively. The circuit may also find application as a pulse width modulator if it is slightly modified (if the R_1C_1 combination is replaced by a regulated power supply, and if Uref is a sawtooth voltage source). Orig. art. has: 1 figure. [BD]

SUB CODE: 09/ SUBM DATE: none
ATD PRESS: 5018

Card 2/2

TURCHENKOVA, Ye.K., inzh.; SIKORSKIY, A.I., inzh.; YEGNUS, R.M., inzh.; BOLDYREV, L.I., inzh.; RAZNOTINA, Ye.T., inzh.; BOL'SHAKOV, L.A., kand.tekhn.nauk; GAVRIKOV, V.Z., inzh.

Life of 650 rolling mill sleeve joints made of cast iron with spheroidal graphite. Stal' 18 no.8:763-766 Ag '58. (MIRA 11:8)

1.Zhdanovskiy metallurgicheskiy institut i zavod "Azovstal'."
(Cast iron--Metallography)

SOV/133-58-8-29/30

AUTHORS: Turchenkova, Ye.K., Sikorskiy, A.I., Yegnus, R.M., Boldyrev, L.I., Raznotina, Ye.T., Engineers, Bol'shakov, L.A., Candidate of Technical Sciences, and Gavrikov, V.Z., Engineer

TITLE: Performance of the Coupling Sleeves Made From Nodular Iron at the Mill 650 (Rabota soyedinitel'nykh muft iz chuguna s sharovidnym grafitom na stane 650)

PERIODICAL: Stal', 1958, Nr 8, pp 763 - 766 (USSR)

ABSTRACT: As the durability of the coupling sleeves of the mill 650 made from grey iron decreased with increased degree of reduction per pass introduced in the rolling practice, the use of sleeves made from nodular iron was investigated. Four series of experimental smelting of magnesium-inoculated iron were carried out. Sleeves from the first series were tested as cast and of the remaining series after various heat treatments. The chemical composition, mechanical, and conditions of thermal treatment are given in Table 1. The microstructure of heat-treated metal - Figures 1-3, the mould for casting of sleeves - Figure 4, the results of service life of sleeves made from nodular iron, grey iron and steel - Table 2. On the basis of the results obtained, it is concluded that the service life

Card1/2

SOV/133-58-8-29/30

Performance of the Coupling Sleeves Made from Nodular Iron at the Mill 650

of sleeves from nodular iron is 4-6 times higher than that of sleeves made from grey iron. The optimum heat treatment is normalisation with subsequent annealing at 580 °C. Sleeves should be cast with the consumption of metal for shrinkage head not less than 20% of the weight of casting. When coupling sleeves are not heat-treated, then the sum of C + Si in nodular iron should be maintained in a range of 5.5-6.0%. There are 5 figures and 2 tables.

ASSOCIATIONS: Zhdanovskiy metallurgicheskiy institut (Zhdanov Metallurgical Institute) and Zavod "Azovstal'" ("Azovstal'" Works)

Card 2/2 1. Couplings--Materials 2. Couplings--Test results
3. Iron--Applications 4. Steel--Applications

KRASOVITSKIY, V.S., kand.tekhn.nauk; TURCHENKOVA, Ye.K., inzh.; YEGNUS, R.M., inzh.

Increasing the durability of closed-bottom molds. Stal' 21 no.5: 475-476 My '61. (MIRA 14:5)

1. Zhdanovskiy metallurgicheskiy institut i zavod "Azovstal'."
(Steel ingots)

ABBAKUMOVA-ZERALOVA, O.N., GEFTER, YU.M., GLINKA-CHERNOBUTSKAYA, YE.L., MALIK-BAGDASAROVA, M.G., TURCHENKO, YE.I., TUMAN-CHERTYAGOKOVA, YU.K.

Metabolism

Changes of the metabolism index in tissues of rats due to alimentary protein deficiency. Ukr.biokhim.zhur. 22, no. 3, 1950.

9. Monthly List of Russian Accessions, Library of Congress, OCTOBER 1952 ~~1953~~. Unclassified.

ABBAKUMOVA-ZEPALOVA, O.N., GEFTER, YU.M., GINZBURG-CHERNOKUTSKAYA, YE.I.,
MELIK-BAGDASAROVA, L.G., TURCHENKO, YE.I., TYDMAN-GEFTVEROKOVA, Y..K.

Proteins

Changes of the metabolism index in tissues of rats due to alimentary protein deficiency.
Ukr.biokhim.zhur. 22, no. 3, 1950.

9. Monthly List of Russian Accessions, Library of Congress, OCTOBER 1952 ~~1953~~ Unclassified.

ABBAKUMOVA-ZEPALOVA, O.N., GEFTER, YU. N., GLYNKA-CHERNOBUTSKAYA, YE. L.,
MELIK-BAGDASAROVA, M.G., TURCHENKO, YE. I., TYDMAN-CHETVERIKOVA, YE. K.

Proteins

Changes of the metabolism index in tissues of rats due to alimentary protein deficiency, Ukr. biokhim. zhur., 22, No. 3, 1950.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

GAL'PERIN, Ye.I.; TURCHENKOV, V.I.

Ring phase detector for high output voltages. Priborostroenie no.11:21-22 N '62. (MIRA 15:12)
(Voltage regulators)

TURCHENKOV, V.

Switching circuit using diodes. Radio no.2:40-42, 44 F '64. (MIRA 17:3)

TURCHENKOV, V.I., inzh.

An a.c. time relay. Avtom., telem. i sviaz' 7 no.11:14-15 N '63. (MIRA 16:12)

I. 19009-63 BDS/EWT(d)

ACCESSION NR: AP3006405 S/0119/63/000/008/0025/0026

AUTHOR: Turchenkov, V. I.

TITLE: An instrument for measuring high speeds within a small angle of shaft rotation (Author's Certificate no. 149637)

SOURCE: Priborostroyeniye, no. 8, 1963, 25-26

TOPIC TAGS: speed, speed measurement, shaft speed measurement

ABSTRACT: A new instrument is described for measuring high speeds of motors, turbines, etc., or for measuring the speed within a small angle of turn of the shaft; in the latter case, a linear-potentiometer-type primary detector is required. A rectangular pulse whose duration is "proportional to the speed" is integrated, and stored as a voltage; the voltage is amplified and applied to an indicating instrument whose scale is calibrated in speed units. The instrument can measure "high speeds, such as 1,000 degrees/sec and more," within a

Card 1/2

KRASOVITSKIY, V.S., kand.tekhn.nauk; TURCHENKOVA, Ye.K., inzh.;
YEGNUS, R.M., inzh.

Chill casting of trays for ingot molds. Stal' 23 no.2:185-187
F '63. (MIRA 16:2)

1. Zhdanovskiy metallurgicheskiy institut i Avoskiy staleplavil'nyy zavod im. Sergo Ordzhonikidze v Zhdanove.
(Iron founding)

KRASOVITSKIY, V.S., kand.tekhn.nauk; BOL'SHAKOV, L.A., kand.tekhn.nauk; TURCHENKOVA, Ye.K., inzh.; GORBANEV, Ya.S., inzh.; YEGNUS, R.M., inzh.; CHUMAK, M.A., inzh.; KISSEL', N.N., inzh.; SAL'MAN, B.Sh., inzh.

Increasing the stability of ingot molds by an addition of ferrotitanium. Stal' 23 no.8:717-718 Ag '63. (MIRA 16:9)

1. Zhdanovskiy metallurgicheskiy institut, zavod "Azovstal'" i zavod im. Il'icha.

(Ingot molds)

BOL'SHAKOV, L.A.; TURCHENKOVA, Ye.K.

Equal wall solid bottom molds. Metallurg 6 no.9:16 S '61. (MIRA 14:9)

1. Zhdanovskiy metallurgicheskiy institut i zavod "Azovstal'".
(Ingot molds)

TURCHENOV, N.I.

USSR/Chemical Technology - Chemical Products and Their Application. Treatment of Solid Mineral Fuels

I-7

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2459

Author : Turchenov, N.I.
Inst :
Title : Ensuring Uniform Quality of Metallurgical Coke as Concerns Its Mechanical Strength.

Orig Pub : Koks i khimiya, 1957, No 4, 18-23

Abstract : On the basis of the plastometric-component classification of coal, proposed by the author, a method has been developed for determining the anticipated mechanical strength of coke, from data concerning the amount of heliphycized matter (vitrain group) and cutin elements (H + C), fusainized components and coking index of coal mixtures. A computation batching chart is provided, the use of which makes it possible to determine the proportions of individual components of the batch mixture and the

Card 1/2

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2459

plastometric-component characteristics for a given strength of the coke.

TURCEK, F.

SCIENCE

Periodical BIOLOGICKE PRACE. Vol. 4, no. 8, 1958.

TURCEK, F. Trees, birds, and mammals in some bush belts between fields. p. 47.

Monthly List of East European Accessions (EEAI) Vol. 8, no. 3, March, 1959. LC
Unclassified

DUBROVIN, Ye., dotsent; MERKULOV, Ye., dotsent; TURCHIKHIN, E., dotsent

Precast reinforced concrete city pavements. Zhil.-kom.khoz. 10 no.9:27-29 '60. (MIRA 13:9)

1. Kafedra dorog Vsesoyuznogo zaochnogo inzhenerno-stroitel'nogo instituta.

(Pavements, Concrete)

TURCHIKHIN, E.

TURCHIKHIN, E., inzhener.

X-ray method of examining asphalt concrete. Zhil.-kom.khoz. 4 no.4:26-27 '54. (MLRA 7:7)
(Asphalt) (X-rays--Industrial applications)

MURZAYEVA, L.; TURCHIKHIN, E.

Making high-quality asphalt concrete. Zhil.-kom. khoz. 9 no.4: 25-26 '59. (MIRA 12:7)
(Asphalt concrete)

TURCHIKHIN, E., dotsent; ZAYTSEV, L., starshiy prepodavatel'

Connection with life. Zhil.-kom. khoz. 13 no.4:19-20 Ap '63.
(MIRA 16:5)

(Municipal services--Study and teaching)

GUREVICH, L., kand. tekhn. nauk; TURCHIKHIN, E., kand. tekhn. nauk

Using colored materials in constructing pavements. Zhil.-kom. khoz. 9 no.9:16-17 '59. (MIRA 13:2)
(Pavements)

OL'MEZOV, G., inzhener; TURCHIKHIN, E., inzhener.

"Asphalt concrete road surfaces." L.B. Gezentsvei. Reviewed by G. Ol'mezov, E. Turchikhin. Zhil.-kom.khoz. 5 no.8:28 '55. (MLRA 9:3)

(Roads, Concrete) (Gezentsvey, L.B.)

ACC NR: AM5010600 (A) Monograph UR/

Dubrovin, YEvgeniy Nikolayevich; Turchikhin, Emmanuil YAkovlevich

Prestressed reinforced concrete used in the construction of city streets (Predvaritelno napryazhenyy zhelezobeton v stroitel'stve gorodskikh dorog) Moscow, Stroyizdat, 1965, 302 p. illus., biblio., tables. 3,500 copies printed.

TOPIC TAGS: highway construction, railway construction, concrete, reinforced concrete

PURPOSE AND COVERAGE: This book gives the results of experiments made by scientists and production organizations, and it includes studies made by the author in the field of design construction and technology of building monolithic and sectional road surfaces and rail supports for trolley lines from prestressed reinforced concrete. Also shown are the developments in foreign technology and practice in this field.

TABLE OF CONTENTS (abridged):

Card 1/2 UDC:625.7/.8:691.32

ACC NR: AM6010600

SUB CODE: 13 / SUBM DATE: 22Jul65 ORIG REF: 085 OTH REF: 021

Card 2/2

MERKULOV, Yefim Afanas'yevich, dots., kand. tekhn. nauk; DUBROVIN, Yevgeniy Nikolayevich, dots., kand. tekhn. nauk; TURCHIKHIN, Emmanuil Yakovlevich, dots., kand. tekhn. nauk; YUDIN, Vasiliy Aleksandrovich, dots., kand. tekhn. nauk; Prinimali uchastiye: SLAVUTSKIY, A.K., dots., kand. tekhn. nauk; ZAYTSEV, L.K., inzh.; ZAMAKHAYEV, M.S., red.; OVSYANNIKOVA, Z.G., red. izd-va

[Examples of the design of roads and public transportation systems in cities]Primery proektirovaniia dorog i setei passazhirskogo transporta v gorodakh. [By] E.A.Merkulov i dr. Moskva, Gos. izd-vo "Vysshaia shkola," 1962. 265 p. (MIRA 16:2)
(Road construction) (Rapid transit)

DUBROVIN, Yevgeniy Nikolayevich; TURCHIKHIN, Emmanuil Yakovlevich
Prinimal uchastiye NAUMENKO, V.S., kand. tekhn. nauk;
NIKOLAYEVA, N.M., red.

[Prestressed reinforced concrete in the construction of city streets] Predvaritel'no-napriazhennyi zhelezobeton v stroitel'stve gorodskikh dorog. Moskva, Stroiizdat, 1965. 302 p. (MIRA 18:12)

TURCHIKHIN,E., inzhener

Investigating the water permeability of a bituminous film by means of tagged atoms. Zhil.-kom.khoz.5 no.5:24-25 '55. (MLRA 8:11)
(Road materials)

VINITSKIY, L., dotsent; DUBROVIN, Ye., dotsent; TURCHIKHIN, E., dotsent

Elastic securing of rails to reinforced-concrete ties. Zhil.-kom. khoz. 10 no.10:30-31 '60. (MIRA 13:10)

1. Vsesoyuznyy zaochnyy inzhenerno-stroitel'nyy institut.
(Street railways--Rails)

TURCHIKHIN, E. Ya.

TURCHIKHIN, E. Ya., Cand Tech Sci, -- (diss) "Study of the water permeability of asphalt concrete by means of radioactive isotopes." Mos, 1958. 13 pp (Min of Higher Education USSR. Mos Order of Labor Red Banner Engineering -Construction Inst im.V.V. Kuybyshev). 200 copies (KL,20-58,98)

STRAMENTOV, A.Ye., prof., doktor tekhn.nauk; AKSEL'ROD, L.S., dots., kand. tekhn.nauk; TURCHIKHIN, E.Ya., inzh.

Using autoradiography in testing waterproofness of asphalt and cement concretes. Nauch.dokl.vys.shkoly; stroi. no.1:246-250 '58. (MIRA 12:1)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury (for Stramentov). 2. Rekomendovana kafedroy grodskogo stroitel'stva i khozyaystva Moskovskogo inzhenerno-stroitel'nogo instituta imeni V.V. Kuybysheva.

(Radioisotopes--Industrial application)
(Concrete--Testing)

SPERANTOV, N., kandidat tekhnicheskikh nauk; TURCHIKHIN, E.

Using radioactive isotopes in controlling production of packed slabs. Stroi.mat. 2 no.12:30-31 D '56. (MLRA 10:2)

1. Zaveduyushchiy laboratoriyey instituta im. V.V.Kuybysheva (for Turchikhin).
(Radioisotopes--- Industrial applications)
(Building blocks)

DUBROVIN, Yevgeniy Nikolayevich; TURCHIKHIN, Emmanuil Yakovlevich; SHAFRAN, Vladimir Leont'yevich; SAMOYLOV, D.S., red.; ISEYEVA, R.Kh., red.izd-va; KHENOKH, F.M., tekhn. red.

[City vehicular and pedestrian crossings at various levels] Gorodskie transportnye i peshekhodnye peresecheniia v raznykh urovniakh. Moskva, Izd-vo MKKh RSFSR, 1963. 131 p. (MIRA 17:2)

DUBROVIN, Yevgeniy Nikolayevich; TURCHIKHIN, Emmanuil Yakovlevich; YUDIN, Vasiliy Aleksandrovich; LANTSBERG, Yu.S., red.; OVSYANNIKOVA, Z.G., red.izd-va; GRIGORCHUK, L.A., tekhn. red.

[Organization of the construction and operation of urban roads] Organizatsiia stroitel'stva i ekspluatatsii gorodskikh dorog. Moskva, Vysshaia shkola, 1963. 305 p. (MIRA 16:8)

(Road construction) (Streets)

DUBROVIN, Yevgeniy Nikolayevich; ZAYTSEV, Leonid Konstantinovich; TURCHIKHIN, Emmanuil Yakovlevich; SOSYANTS, V.G., red.; LYUBINA, R.M., red.izd-va; KHENOKH, F.M., tekhn. red.

[The economics and the organization of the building and maintenance of city roads] Ekonomika i organizatsiia stroitel'stva i ekspluatatsii gorodskikh dorog. Moskva, Izd-vo MKKh RSFSR, 1963. 233 p. (MIRA 16:10)

(Roads)

TURCHIKHIN, E.Ya., inzhener.

Using radioactive isotopes for testing water resisting properties of the asphalt cement. Ger. khoz. Mosk. 31 no.3:34-35 Mr '57.
(Asphalt--Testing) (MLRA 10:4)
(Radioisotopes--Industrial applications)

TIKHONOV, A.Ya., prof.; TURCHIKHIN, E.Ya., inzh.

Using radioactive isotopes for studying surface additives in asphalt concrete. Avt.dor.20 no.10:36-37 O '57. (MIRA 10:12)
(Radioisotopes--Industrial applications) (Asphalt concrete--Testing)

DUBROVIN, Ye.N. dotsent; MERKULOV, Ye.A., dotsent; TURCHIKHIN, E.Ya. dotsent

Use precast reinforced concrete in road construction. Gor. khoz. Mosk. 36 no.9:17-20 S '62 (MIRA 15:10)

1. Vsesoyuznyy zaochnyy inzhenerno-stroitel'nyy institut. (Prestressed concrete construction) (Moscow—Road construction)

DUBROVIN, Yevgeniy Nikolayevich; TURCHINKIN, Emmanuil Yakovlevich; ZAMAKHAYEV, M.S., red.

[Pavements of prestressed reinforced concrete] Dorozhnye pokrytiia iz predvaritel'no napriazhennogo zhelezobetona. Moskva, Transport, 1964. 97 p. (MIRA 17:6)

DOBROVIN, V.N.; [illegible], I.K.; ZURCHIKHIN, E.A.

[illegible] problem. Avt.dor. 28 no.8:21-23 Ag '65. (MIRA 18:11)

[illegible], [illegible]; [illegible], [illegible]; F[illegible]NBERG, [illegible]; [illegible]
T[illegible], I.Ya.

Using infrared rays in asphalt concrete [illegible]
28 no.9:20-22 [illegible] '65. [illegible]

S/117/60/000/006/005/010
A004/A002

AUTHOR: Turchin, D.Ye.

TITLE: Press Mold for the Manufacture of Plastic Gears

PERIODICAL: Mashinostroitel', 1960, No. 6, p. 24

TEXT: The author reports on a new press mold for the manufacture of caprone gears which was made at the "Tashtekstil'mash" Plant. The gear with cast spiral tooth is reinforced by a metal bushing. The gear rim is pressure-cast in a special press-mold on the PA-50 (LD-50) thermoplastic automatic. A diagram shows the design of the press mold which consists of a stationary and movable part. The stationary part is placed in a flange and is fastened to a stationary plate of the thermoplastic automatic. The author gives a detailed description of the press-mold design and its operation and points out that the manufacture of caprone gears by this method sets free gear-milling machines and saves metal. Morecver, caprone gears ensures noiseless operation. There are 2 figures.

Card 1/1

TURCHIN, D.Ye.

Mold for making plastic pinions. Mashinostroitel' no.6:24 Je '60. (MIRA 13:8)
(Plastics--Molding)

1. TURCHIN D.YE.

2. USSR (600)

4. Turning

7. New system of trunign tapered pins. Vest.mash. 33 no.1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

TURCHIN, F., doktor sel'skokhoz.nauk, prof.

Chemistry and the harvest. NTO 6 no.1:5-6 Ja '64. (MIRA 17:2)

1. Predsedatel' sektsii khimizatsii TSentral'nogo pravleniya Vsesoyuznogo khimicheskogo obshchestva im. Mendeleyeva.

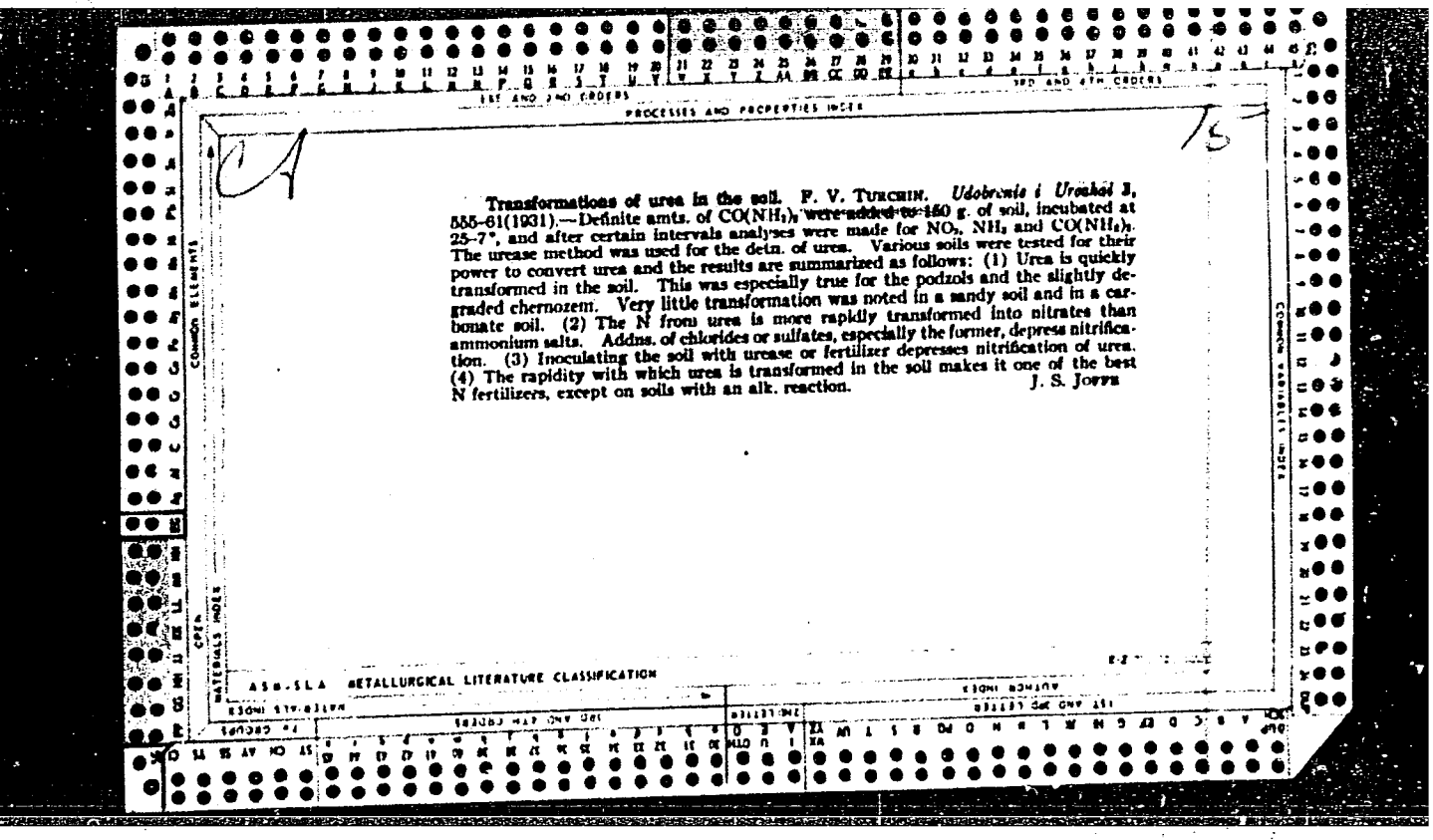
TURCHIN, F., kapitan Jugo ranga

Political education of workers and employees. Komm. [illegible]
Sil 4 no.12:32-37 Je '64.

SOKOLOV, A. V., prof.; TURCHIN, F. V., prof.

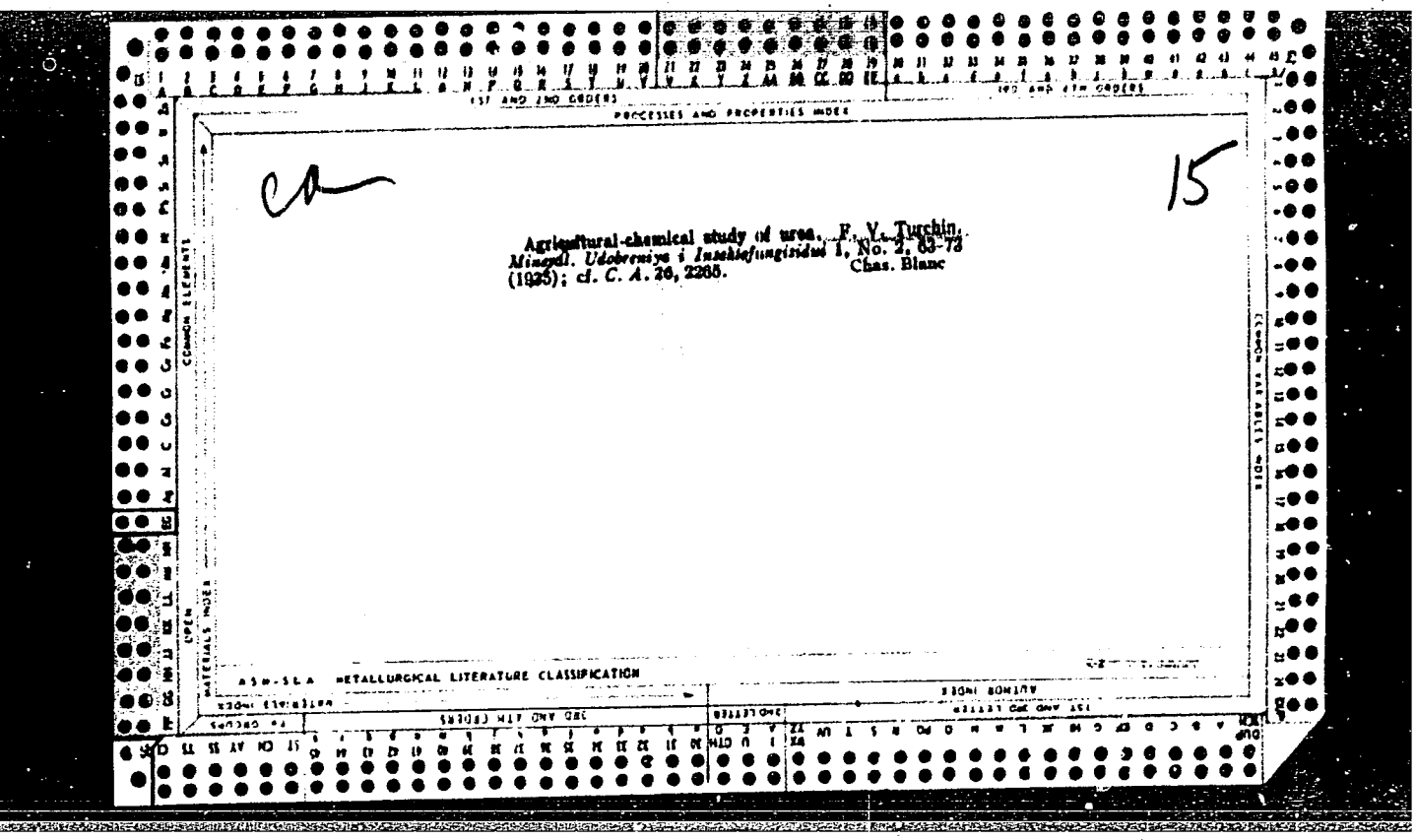
Use of the isotopes P^{32} and N^{15} in the agricultural chemistry.
Zhur. VKHO 7 no.5:489-494 '62. (MIRA 15:10)

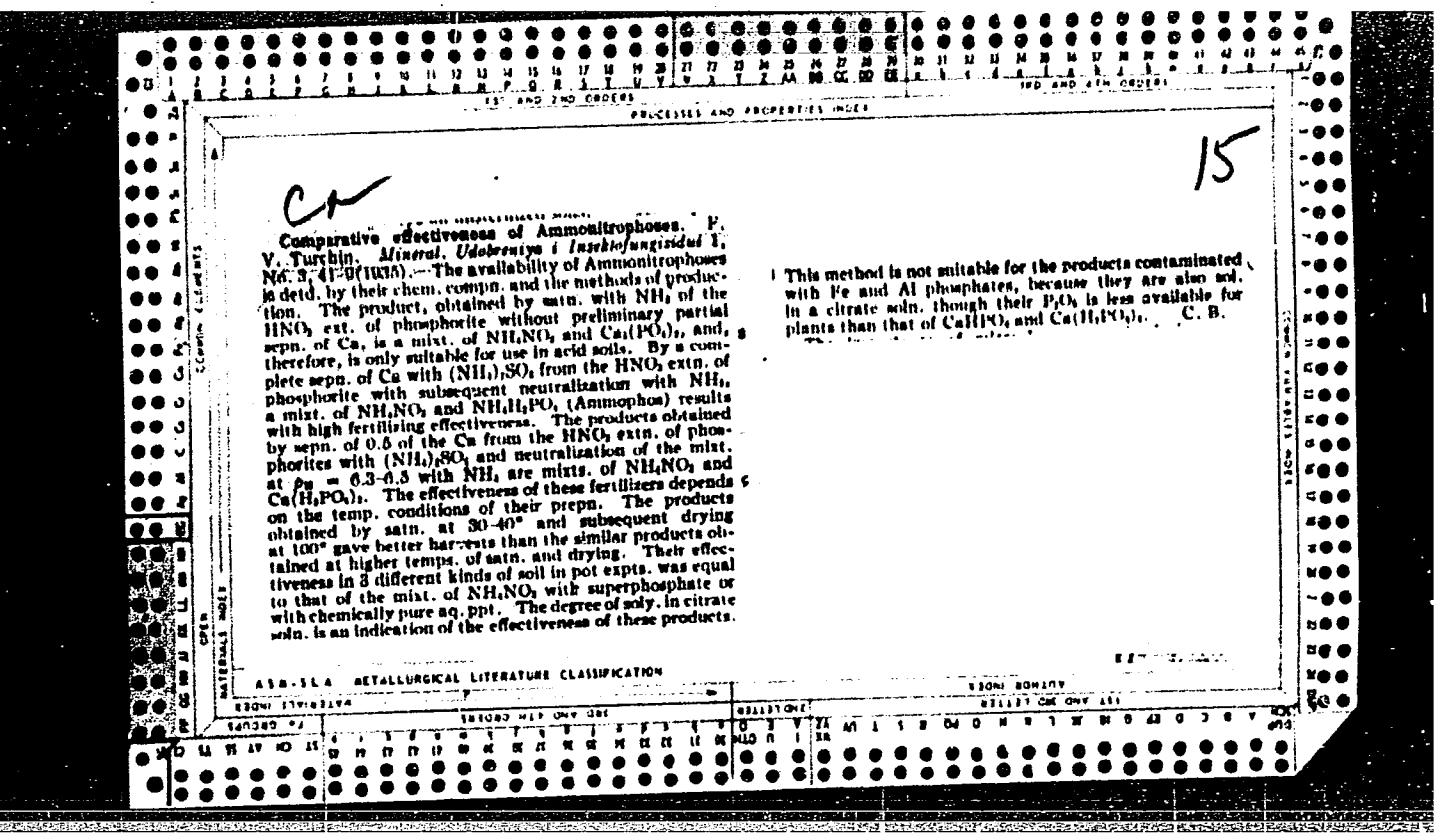
(Agricultural chemistry) (Phosphorus—Isotopes)
(Nitrogen—Isotopes)



Transformations of urea in the soil. F. V. Turchin. *Udobrenie i Urozhai* 3, 555–61(1931).—Definite amts. of $CO(NH_2)_2$ were added to 150 g. of soil, incubated at 25–7°, and after certain intervals analyses were made for NO_3, NH_3 and $CO(NH_2)_2$. The urease method was used for the detn. of urea. Various soils were tested for their power to convert urea and the results are summarized as follows: (1) Urea is quickly transformed in the soil. This was especially true for the podzols and the slightly degraded chernozem. Very little transformation was noted in a sandy soil and in a carbonate soil. (2) The N from urea is more rapidly transformed into nitrates than ammonium salts. Addns. of chlorides or sulfates, especially the former, depress nitrification. (3) Inoculating the soil with urease or fertilizer depresses nitrification of urea. (4) The rapidity with which urea is transformed in the soil makes it one of the best N fertilizers, except on soils with an alk. reaction.

J. S. Joffe





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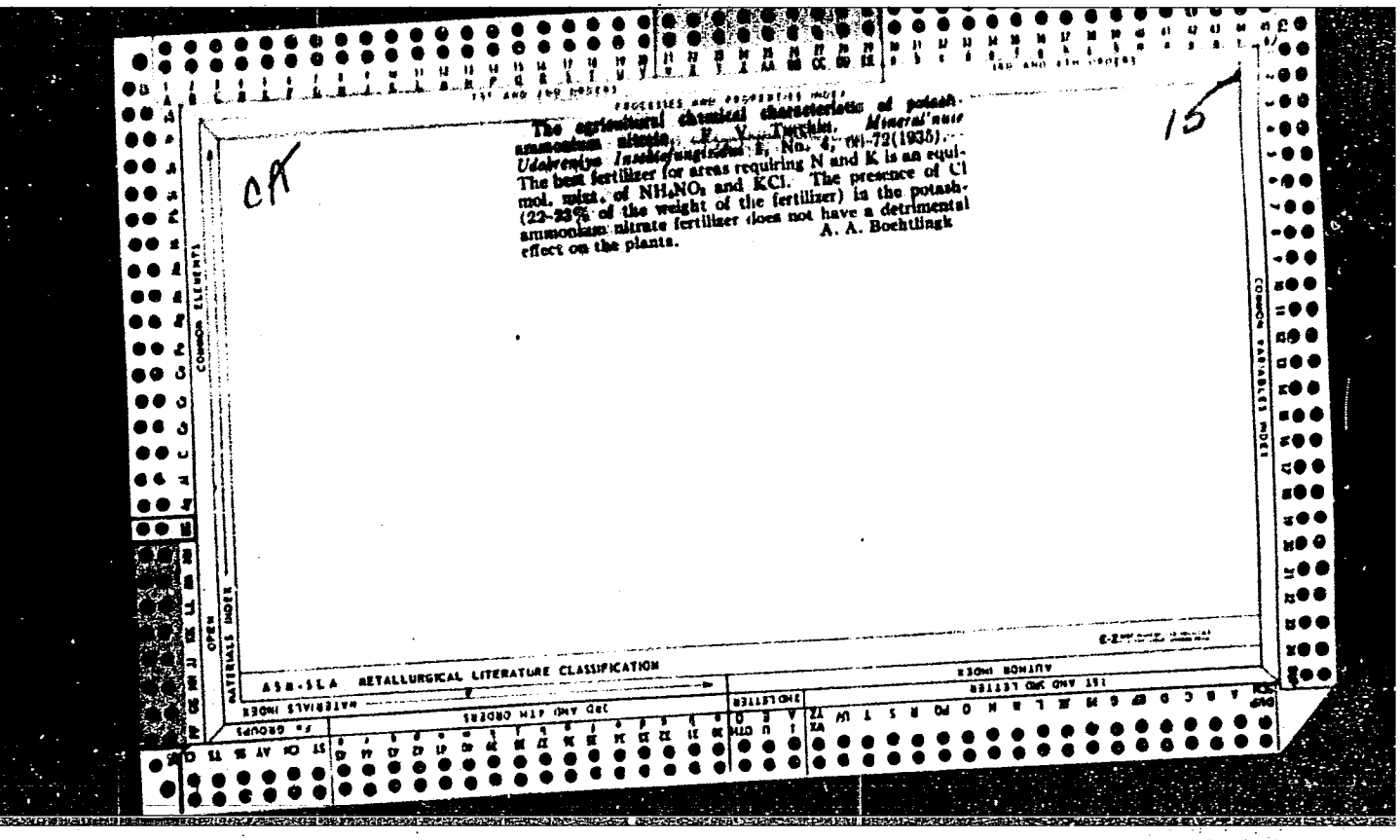
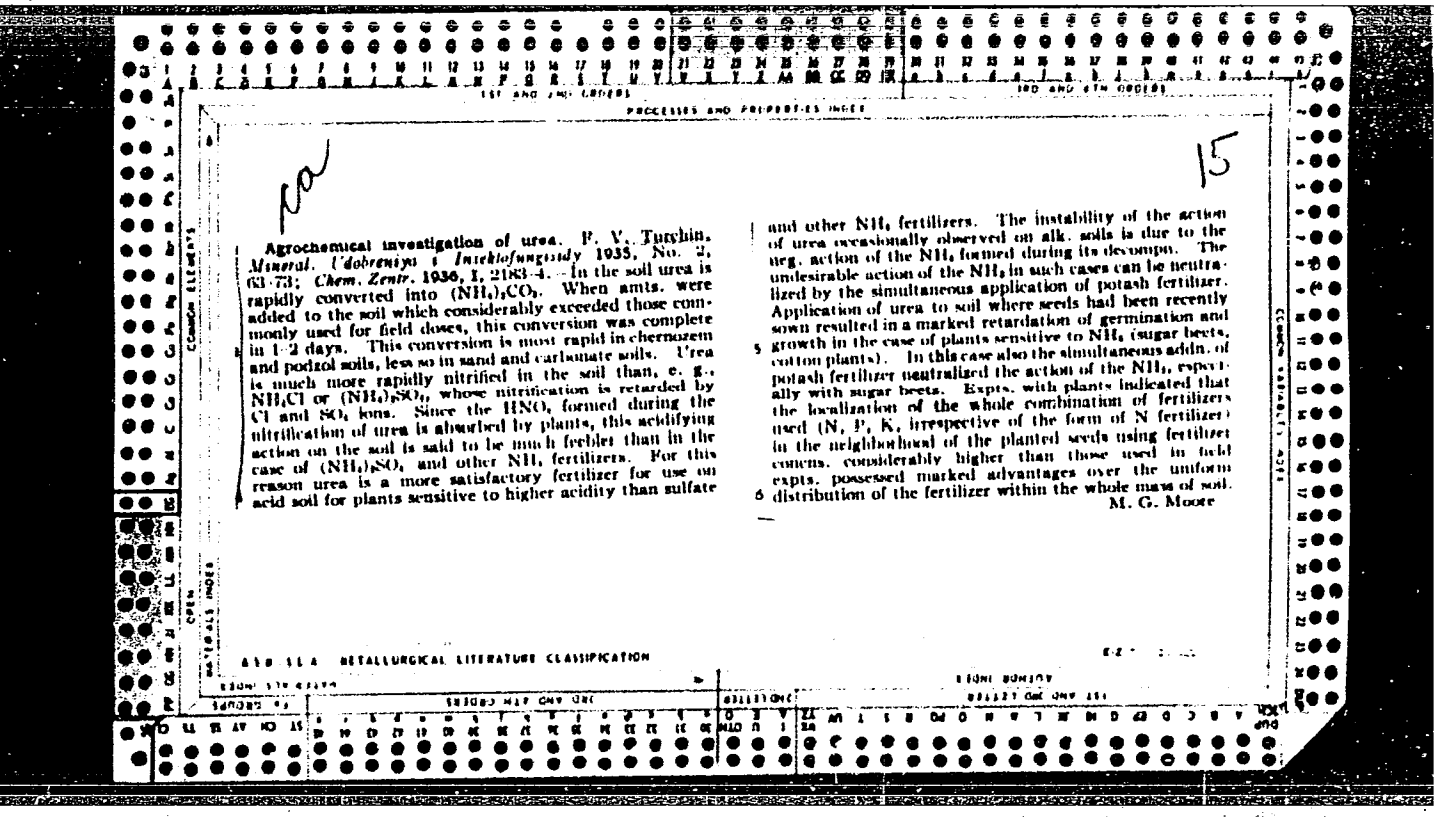
Comparative effectiveness of Ammonitrophoses. P. V. Turchin. *Mineral. Udobreniya i Insektofungisidi* 1, No. 3, 41-9(1938).—The availability of Ammonitrophoses is detd. by their chem. compn. and the methods of production. The product, obtained by satn. with NH_3 of the HNO_3 ext. of phosphorite without preliminary partial sepn. of Ca, is a mixt. of NH_4NO_3 and $Ca_3(PO_4)_2$, and, therefore, is only suitable for use in acid soils. By a complete sepn. of Ca with $(NH_4)_2SO_4$ from the HNO_3 extn. of phosphorite with subsequent neutralization with NH_3, a mixt. of NH_4NO_3 and $NH_4H_2PO_4$ (Ammophos) results with high fertilizing effectiveness. The products obtained by sepn. of 0.5 of the Ca from the HNO_3 extn. of phosphorites with $(NH_4)_2SO_4$ and neutralization of the mixt. at p_H = 6.3-6.5 with NH_3 are mixts. of NH_4NO_3 and $Ca(H_2PO_4)_2$. The effectiveness of these fertilizers depends on the temp. conditions of their prepn. The products obtained by satn. at 30-40° and subsequent drying at 100° gave better harvests than the similar products obtained at higher temps. of satn. and drying. Their effectiveness in 3 different kinds of soil in pot expts. was equal to that of the mixt. of NH_4NO_3 with superphosphate or with chemically pure aq. ppt. The degree of soly. in citrate soln. is an indication of the effectiveness of these products. This method is not suitable for the products contaminated with Fe and Al phosphates, because they are also sol. in a citrate soln. though their P_2O_5 is less available for plants than that of $CaHPO_4$ and $Ca(H_2PO_4)_2$. C. B.



The agricultural chemical characteristics of potash-ammonium nitrate. E. V. Tyurikov. *Mineral'nye Udobreniya (Fertilizers)* 5, No. 4, 69-72(1935). The best fertilizer for areas requiring N and K is an equi-mol. mixt. of NH_4NO_3 and KCl. The presence of Cl (22-23% of the weight of the fertilizer) in the potash-ammonium nitrate fertilizer does not have a detrimental effect on the plants.
A. A. Boehtlingk



Agrochemical investigation of urea. P. V. Turykin. *Mineral. Udobreniya i Insektofungitsidy* 1935, No. 2, 63-73; *Chem. Zentr.* 1936, I, 2183-4.—In the soil urea is rapidly converted into $(NH_4)_2CO_3$. When amts. were added to the soil which considerably exceeded those commonly used for field doses, this conversion was complete in 1-2 days. This conversion is most rapid in chernozem and podzol soils, less so in sand and carbonate soils. Urea is much more rapidly nitrified in the soil than, e. g., NH_4Cl or $(NH_4)_2SO_4$, whose nitrification is retarded by Cl and SO_4 ions. Since the HNO_3 formed during the nitrification of urea is absorbed by plants, this acidifying action on the soil is said to be much feebler than in the case of $(NH_4)_2SO_4$ and other NH_4 fertilizers. For this reason urea is a more satisfactory fertilizer for use on acid soil for plants sensitive to higher acidity than sulfate and other NH_4 fertilizers. The instability of the action of urea occasionally observed on alk. soils is due to the neg. action of the NH_3 formed during its decompn. The undesirable action of the NH_3 in such cases can be neutralized by the simultaneous application of potash fertilizer. Application of urea to soil where seeds had been recently sown resulted in a marked retardation of germination and growth in the case of plants sensitive to NH_3 (sugar beets, cotton plants). In this case also the simultaneous addn. of potash fertilizer neutralized the action of the NH_3, especially with sugar beets. Expts. with plants indicated that the localization of the whole combination of fertilizers used (N, P, K, irrespective of the form of N fertilizer) in the neighborhood of the planted seeds using fertilizer concns. considerably higher than those used in field expts. possessed marked advantages over the uniform distribution of the fertilizer within the whole mass of soil.

M. G. Moore

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

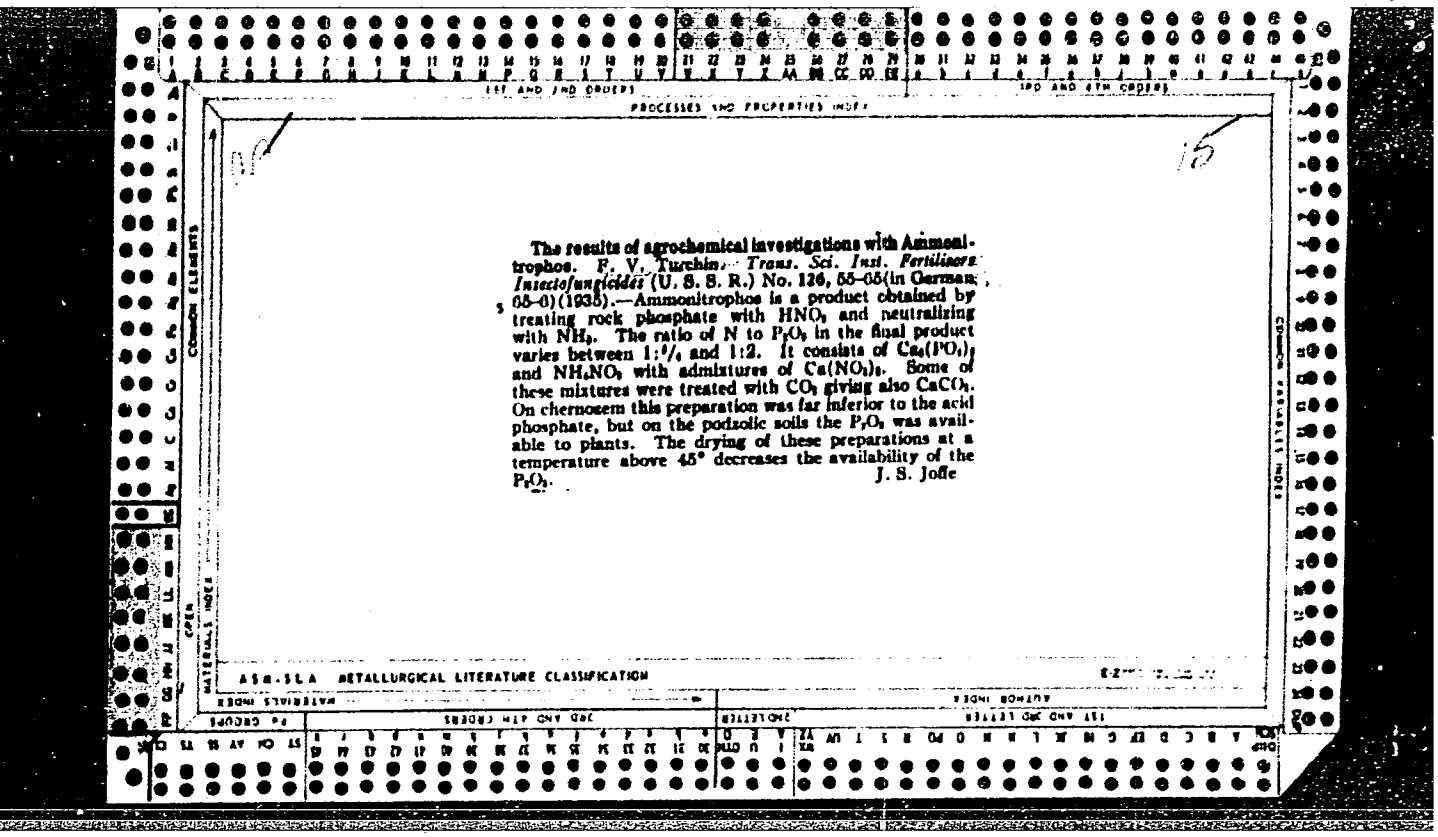
Ca

15

The agrochemical evaluation of Ammonitrophos. P. V. Turchin. *Mineral. Udobreniya i Insektofungisidy* 1935, No. 3, 41-9; *Chem. Zentr.* 1936, I, 2184.—Ammonitrophos (Ca phosphate and NH_4NO_3) is prepd. by satg. nitrate-contg. powd. phosphorite or its ext. with NH_3 without previously removing a part of the Ca. It is a mixt. of NH_4NO_3 and $Ca_3(PO_4)_2$. Such prepns. can be used to advantage only in acid podzol soil. Since on such soils phosphorite powder, P_2O_5, is almost as effective as the Ammonitrophos product whose P_2O_5 is combined as $Ca_3(PO_4)_2$, there is no great advantage to be gained in the prepn. of the latter. If the Ca is removed from the HNO_3 ext. by addn. of $(NH_4)_2SO_4$ and the ext. then neutralized with NH_3, a mixt. of NH_4NO_3 and NH_4 phosphates (Ammophos) is obtained. If only about half of the Ca is removed before neutralization with NH_3 (p_H 6.3-6.5), then a mixt. of $CaHPO_4$ and NH_4NO_3 is obtained. The effectiveness of such a mixed fertilizer depends in part upon its temp. of prepn. A prepn. prepd. at a satn. temp. of 30-40° and a drying temp. of 100° produces just as great an increase in crop yield as a mixt. of NH_4NO_3 with superphosphate. Prepns. produced at higher temps. are less effective. A test of the quality of such prepns. which can be used in the absence of large amts. of Fe and Al phosphates is the soly. of the P_2O_5 in citrate soln. This method is not useful in the presence of large amts. of P_2O_5 combined as sesquioxide, since the latter, in spite of its soly. in citrate soln. is less effective as a fertilizer than $Ca(H_2PO_4)_2$ and $CaHPO_4$.

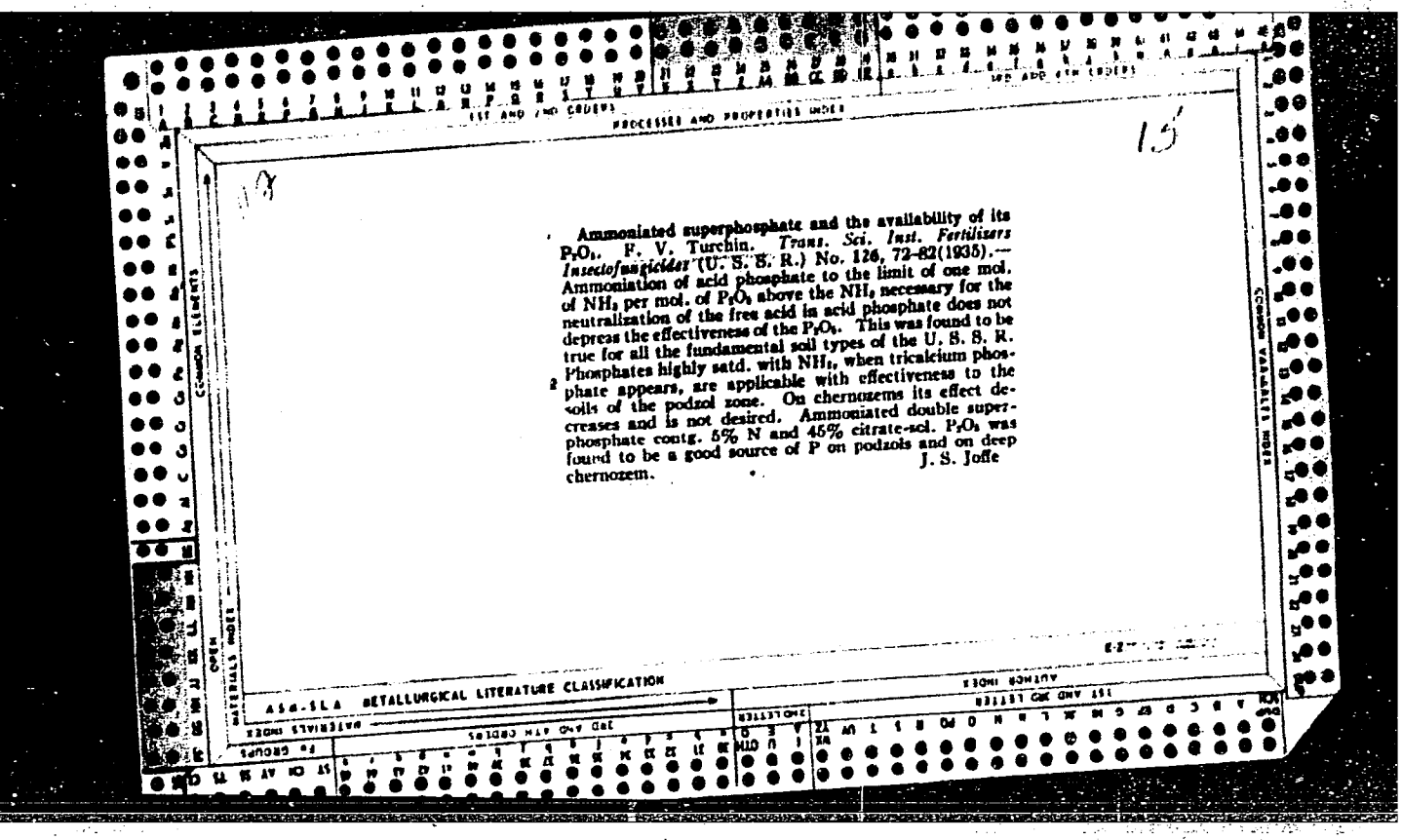
M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



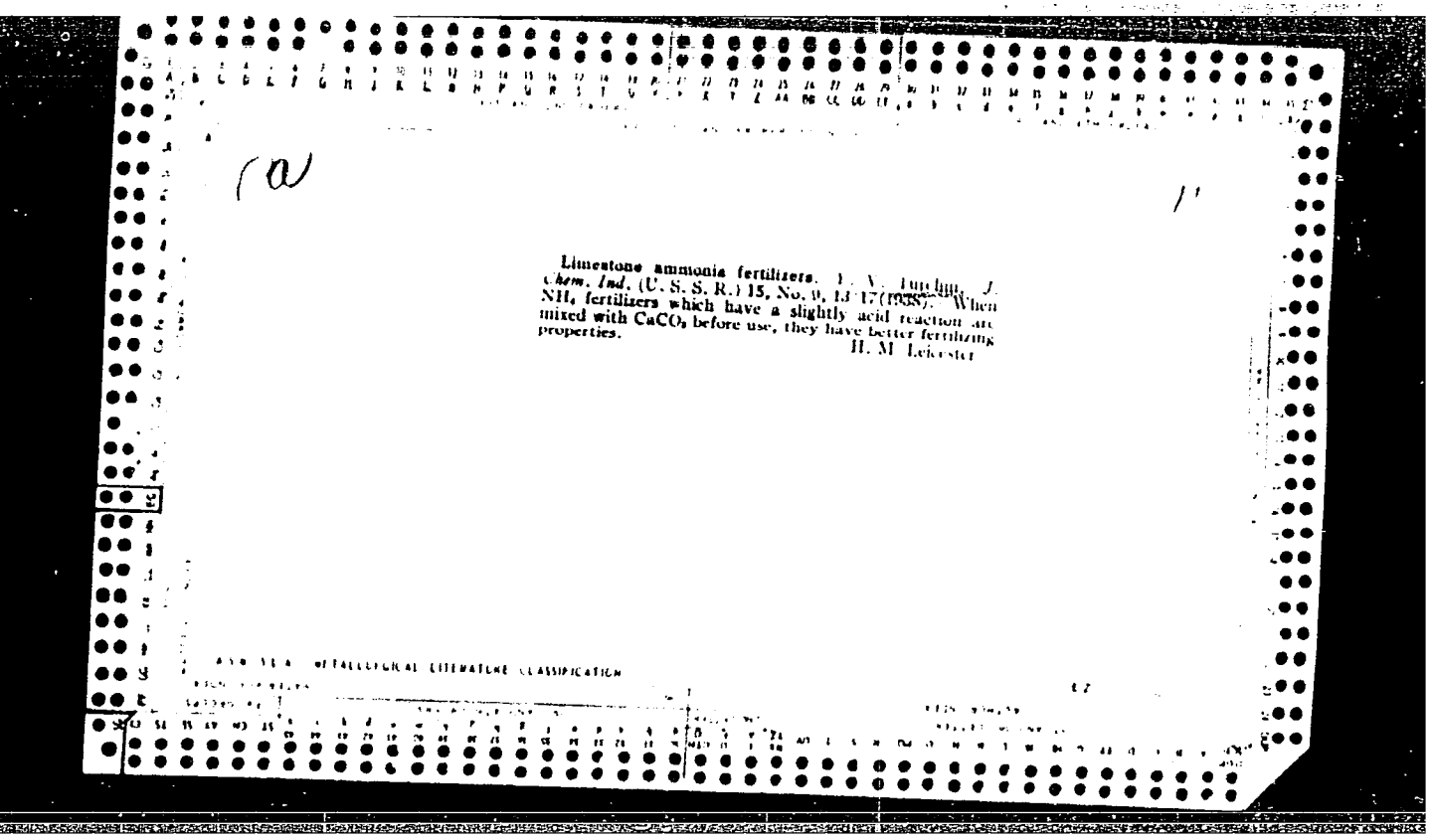
The results of agrochemical investigations with Ammonitrophos. F. V. Turchin. *Trans. Sci. Inst. Fertilizers Insectofungicides* (U. S. S. R.) No. 126, 55–65 (in German; 65–6) (1935).—Ammonitrophos is a product obtained by treating rock phosphate with HNO_3 and neutralizing with NH_3. The ratio of N to P_2O_5 in the final product varies between 1:¾ and 1:2. It consists of $Ca_3(PO_4)_2$ and NH_4NO_3 with admixtures of $Ca(NO_3)_2$. Some of these mixtures were treated with CO_2 giving also $CaCO_3$. On chernozem this preparation was far inferior to the acid phosphate, but on the podzolic soils the P_2O_5 was available to plants. The drying of these preparations at a temperature above 45° decreases the availability of the P_2O_5.

J. S. Joffe



Ammoniated superphosphate and the availability of its P_2O_5. F. V. Turchin. *Trans. Sci. Inst. Fertilizers Insectofungicides* (U. S. S. R.) No. 126, 72-82(1935).—Ammoniation of acid phosphate to the limit of one mol. of NH_3 per mol. of P_2O_5 above the NH_3 necessary for the neutralization of the free acid in acid phosphate does not depress the effectiveness of the P_2O_5. This was found to be true for all the fundamental soil types of the U. S. S. R. Phosphates highly satd. with NH_3, when tricalcium phosphate appears, are applicable with effectiveness to the soils of the podzol zone. On chernozems its effect decreases and is not desired. Ammoniated double superphosphate contg. 5% N and 45% citrate-sol. P_2O_5 was found to be a good source of P on podzols and on deep chernozem.

J. S. Joffe



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Limestone ammonia fertilizers. I. V. Tyurlikov. *J. Chem. Ind.* (U. S. S. R.) 15, No. 9, 13-17 (1938). When NH_4 fertilizers which have a slightly acid reaction are mixed with $CaCO_3$ before use, they have better fertilizing properties.

H. M. Leicester

A V S A METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

Increasing the coefficient of activity of physiologically acid nitrogen fertilizers by liming. E. A. [illegible] and Yu. F. Chirikov. *Khimizatsiya Sotsialist. Zemledeliya* [illegible] S. R. 8, No. 8, 46-50(1939).—Addns. of $CaCO_3$ to physiologically acid N salts, like $(NH_4)_2SO_4$, NH_4Cl or NH_4NO_3, increase the efficiency of these in acid soils. Large quantities of phosphate act in a manner similar to lime. On acid soils these salts decrease the coeff. of phosphate utilization by plants. When the physiologically produced acid is neutralized by $CaCO_3$ on podzol soils the phosphate content of the plants increases. I. S. Joffe

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